

14.2.1.9 Unbundled tandem switching shall provide connectivity to transit traffic to and from other carriers.

14.2.2 Unbundled tandem switching shall accept connections (including the necessary signaling and trunking interconnections) between end offices, other tandems, IECs, ICOs, CAPs and CLEC switches.

14.2.3 Unbundled tandem switching shall provide local tandeming functionality between two end offices including two offices belonging to different CLECs (e.g., between an MCI end office and the end office of another CLEC).

14.2.4 Unbundled tandem switching shall preserve CLASS/LASS features as are available to NYNEX's customers, and Caller ID as traffic is processed.

14.2.5 Unbundled tandem switching shall record billable events as and when available and send them to the area billing centers designated by MCI. Billing requirements are specified in Attachment VIII.

14.2.6 NYNEX shall perform routine testing and fault isolation on the underlying switch that is providing Unbundled tandem switching and all its interconnections in accordance with NYNEX's standard operating procedures.

14.2.7 As arranged by mutual agreement, NYNEX shall provide performance data regarding traffic characteristics or other measurable elements to MCI for review.

14.2.8 Unbundled tandem switching shall include NYNEX's network management function in that all necessary controls employed at the discretion of NYNEX's network management personnel will be applied universally to all traffic regardless of carrier. Any specific variances must be prearranged by MCI under a separate specific agreement.

14.2.9 Unbundled tandem switching shall route calls to NYNEX or MCI endpoints or platforms on a per-call basis as designated by MCI. Detailed primary and overflow routing plans for all interfaces available within the NYNEX switching network shall be mutually agreed by MCI and NYNEX. Such plans shall meet MCI requirements for routing calls through the local network.

14.2.10 Unbundled tandem switching shall process originating toll-free traffic received from an MCI local switch.

14.2.11 In support of AIN triggers and features, unbundled tandem switching shall provide SSP capabilities when these capabilities are not available from the local NYNEX switching Network Element.

14.2.12 The local switching and tandem switching functions may be combined in an office. In such event, both local switching and tandem switching shall provide, where technically feasible, all of the functionality required of each of those unbundled Network Elements in this Agreement.

14.3 Interface Requirements

14.3.1 Unbundled tandem switching shall provide interconnection to the E911 PSAP where the underlying Tandem is acting as the E911 Tandem.

14.3.2 Unbundled tandem switching shall interconnect, with direct trunks, to all carriers with which NYNEX interconnects.

14.3.3 NYNEX shall provide all signaling necessary to provide unbundled tandem switching with no loss of feature functionality.

14.3.4 Unbundled tandem switching shall interconnect with MCIm's switch, using two-way trunks, for traffic that is transiting via the NYNEX network to interLATA or intraLATA carriers. At MCIm's request, unbundled tandem switching shall record and keep records of traffic for billing.

14.3.5 At MCIm's request, unbundled tandem switching shall provide overflow routing of traffic from a given trunk group or groups onto another trunk group or groups according to the methodology that MCIm designates.

14.4 Unbundled tandem switching shall meet all relevant and applicable standards set forth in Section 18.13, except where it is not technically feasible for such equipment as is deployed in the NYNEX network as of the Effective Date to comply with any such standard.

Section 15 Additional Requirements

This Section 15 of this Attachment III sets forth the additional requirements for unbundled Network Elements which NYNEX agrees to offer to MCIm under this Agreement.

15.1 Cooperative Testing

15.1.1 Definition:

Cooperative Testing means that each Party shall cooperate with the other upon request or as needed to: (i) ensure that the Network Elements and Ancillary Functions and additional requirements being provided are in compliance with the requirements of this Agreement; (ii) test the overall functionality of various Network Elements and Ancillary Functions; and (iii) ensure that all operational

interfaces and processes are in place and functioning properly and efficiently for the provisioning and maintenance of Network Elements and Ancillary Functions and so that all appropriate billing data can be provided to MCI.

15.1.2 Requirements

Within forty-five (45) days after the Effective Date of this Agreement, MCI and NYNEX will mutually agree upon a process to resolve technical issues relating to interconnection of MCI's network to NYNEX's network and Network Elements and Ancillary Functions. The mutually agreed upon process shall include procedures for escalating disputes and unresolved issues up through higher levels of each company's management. If MCI and NYNEX do not reach agreement on such a process within forty-five (45) days, any issues that have not been resolved by the parties with respect to such process shall be submitted to the procedures set forth in Part A, Section 16 of this Agreement unless both Parties mutually agree to extend the time to reach agreement on such issues.

15.1.2.1 NYNEX shall provide MCI access for testing where such unbundled equipment is capable of test access (e.g., unbundled copper loop by itself cannot be tested by NYNEX unless it is connected to a NYNEX switch) between a NYNEX Network Element or combinations and MCI equipment or facilities. Where test access is provided, NYNEX will provide those test capabilities in parity with what NYNEX provides itself.

15.1.2.2 MCI may test any unbundled Network Element interface, Network Element or ancillary function.

15.1.2.3 NYNEX shall provide relevant and non-proprietary data as requested by MCI for the Loop components as set forth in Sections 2, 3 and 4 of this Attachment III which MCI may desire to test. Such data may include equipment and cable specifications, signaling and transmission path data.

15.1.2.4 [INTENTIONALLY LEFT BLANK]

15.1.2.5 Upon MCI's request, NYNEX shall report to MCI the test results relating to NYNEX's testing activities performed pursuant to this Section 15 in a mutually agreed format. Following MCI's review of such test results, MCI may notify NYNEX of any deficiencies that are detected.

15.1.2.6 NYNEX shall, where resources and the capability exist, work cooperatively with MCI to temporarily provision and test unbundled Local Switching features as ordered by MCI. MCI agrees to reimburse NYNEX for all reasonable costs in performing this function. Within sixty

(60) days after the Effective Date of this Agreement, MCI and NYNEX shall mutually agree on the procedures to be established between NYNEX and MCI to provide such processes for feature testing.

15.1.2.7 [INTENTIONALLY LEFT BLANK]

15.1.2.8 Unbundled Dedicated Transport and unbundled Loop Feeder may experience alarm conditions due to in-progress tests. NYNEX shall maintain and manage its network in an appropriate manner. Where there is an option to do so and the situation permits, NYNEX will make every reasonable effort to not remove such facilities from service without obtaining MCI's prior approval.

15.1.2.9 Where the situation permits, NYNEX shall obtain acceptance from MCI prior to conducting tests or maintenance procedures on unbundled Network Elements or on the underlying equipment that may cause a service interruption or degradation of service.

15.1.2.10 NYNEX shall provide a single point of contact to MCI that is available seven (7) days per week, twenty-four (24) hours per day for trouble status, sectionalization, resolution, escalation, and closure. Such staff shall be adequately skilled to allow expeditious problem resolution.

15.1.2.11 NYNEX shall provide MCI electronic access to 105 responders, 100-type test lines, or 102-type test lines associated with any circuits under test.

15.1.2.12 Upon MCI's request NYNEX shall participate in Cooperative Testing with MCI to test any operational interface or process used to provide unbundled Network Elements or services to MCI.

15.1.2.13 MCI and NYNEX shall endeavor to complete cooperative testing as stated in Attachment VIII.

15.1.2.14 NYNEX shall participate in cooperative testing requested by MCI whenever it is deemed necessary by MCI to ensure service performance, reliability and subscriber serviceability.

15.1.2.15 MCI may accept or reject the Network Element ordered by MCI if, upon completion of cooperative testing, the tested Network Element does not meet the relevant and applicable requirements stated herein.

15.2 Performance

15.2.1 Scope

This Section 15.2 addresses performance requirements for unbundled Network Elements. It includes requirements for the reliability and availability of unbundled Network Elements, and quality parameters such as transmission quality (analog and digital), and speed (or delay).

15.2.1.1 [INTENTIONALLY LEFT BLANK]

15.2.1.2 NYNEX shall work cooperatively with MCI to determine appropriate performance allocations for unbundled Network Elements.

15.2.2 NYNEX shall provide, for an appropriate price, real-time data access to performance monitoring and alarm data on events affecting (or potentially affecting) MCI's traffic, if and when it is technically feasible to partition such data for MCI.

15.2.3 NYNEX shall provide performance equal to or better than all of the requirements set forth in Section 18.14.

15.2.4 Services and Capabilities

15.2.4.1 MCI may combine Network Elements in any manner technically feasible. When MCI combines Network Elements in the same manner as NYNEX, such combinations shall provide MCI the capability to offer the same retail services NYNEX provides by means of such combination.

15.2.4.2 The following capabilities shall be supported by appropriate unbundled Network Elements as applicable and where such equipment is deployed in the NYNEX network:

15.2.4.2.1 ISDN BRI.

15.2.4.2.2 ISDN PRI.

15.2.4.2.3 Switched Digital Data.

15.2.4.2.4 Non-Switched Digital Data.

15.2.4.2.5 Any types of video applications that a subscriber may order under tariff from NYNEX.

15.2.4.2.6 Any coin services a NYNEX customer may order.

15.2.4.2.7 Frame Relay and ATM.**15.2.4.2.8 Private Line Services.****15.2.5 Specific Performance Requirements for Unbundled Network Elements**

15.2.5.1 The following sections itemize performance parameters for unbundled Network Elements. Where technically feasible, NYNEX shall provide unbundled Network Elements that provide a level of performance equal to that which NYNEX experiences itself for similar configurations of Network Elements. These additional requirements and objectives are given in terms of specific limits. To the extent they mirror the standards and requirements and standards already stated elsewhere (Reference Section 18) all tests (acceptance and ongoing performance) shall meet the limit(s) to satisfy the requirement.

15.2.5.2 Unbundled Loop Combination Architecture Constraints

15.2.5.2.1 The following constraints will limit not only the variety of unbundled Loop Combination architectures that may be considered, but also the architectures NYNEX may consider to deliver any unbundled Network Element. These constraints constitute additional requirements placed by MCI for its own purposes and it is understood that they may constrain NYNEX's ability to provide unbundled Network Elements in some locations that might have otherwise been provided. To the extent NYNEX's records indicate the following conditions exist, NYNEX will endeavor to provide unbundled Network Elements that conform to these requirements. Where NYNEX incurs additional costs in meeting these requirements, MCI agrees to fully reimburse NYNEX. These constraints apply to the entire path between the NID portion of Loop Distribution and the NYNEX switch. Any exceptions to these restrictions shall be specifically requested or approved by MCI in writing.

15.2.5.2.1.1 No more than 1 A-D conversion.

15.2.5.2.1.2 No more than 1, 2-to-4-wire hybrid.

15.2.5.2.1.3 No voice compression.

15.2.5.2.1.4 No echo canceled or suppressers.

15.2.5.2.1.5 One digital loss pad per PBX.

15.2.5.2.1.6 No digital gain.

15.2.5.2.1.7 No additional equipment that might significantly increase intermodulation distortion.

15.2.5.3 [INTENTIONALLY LEFT BLANK]

15.2.5.4 Transmission Impairments

15.2.5.4.1 Performance Allocation

15.2.5.4.1.1 Transmission path impairments may be classified as either analog or digital, and will depend on the nature of the signal transmitted across the unbundled Network Element. Analog impairments may be introduced on any analog portion of the Loop. Digital impairments may be introduced by A/D conversion and by interfaces between digital Network Elements. In addition, noise can be introduced by either analog transmission or the A/D conversion.

15.2.5.4.2 Analog Impairments

15.2.5.4.2.1 Analog impairments are those introduced on portions of the end-to-end circuit on which communications signals are transmitted in analog format. These portions of the transmission path would typically be between NID and an A/D conversion, most commonly on the metallic loop. The performance on the analog portion of a circuit is typically inversely proportional to the length of that circuit.

NYNEX agrees to work cooperatively with MCI to resolve analog transmission impairments for unbundled Network Elements that are provided by NYNEX and that do not meet the relevant and applicable standards set forth in Section 18 for those components NYNEX provides.

15.2.5.4.2 Digital Impairments

Digital impairments occur in the signal wherever it is transmitted in digital format. These errors are usually introduced upon conversion of the signal from analog to digital, as well as at interfaces between digital components. While many digital impairments have little impact on subjective voice quality, they can impact voiceband data performance.

NYNEX agrees to work cooperatively with MCI to resolve digital transmission impairments for unbundled Network Elements that are provided by NYNEX and do not meet the relevant and applicable standards set forth in Section 18 for those components NYNEX provides.

15.2.5.5 Service Availability and Reliability

Availability refers to the time period during which the service is up and usable for its intended purpose. Reliability refers to the probability that a task will be completed successfully, given that it is successfully begun. NYNEX will provide unbundled Network Elements that provide service availability and reliability at parity to those elements similarly deployed in the NYNEX network. The following parameters are understood to be those MCI requests to use in determining the criteria of performance.

15.2.5.5.1 Blocked Calls

15.2.5.5.2 Downtime -- Downtime is the period of time that a system is in a failed state.

15.2.5.5.3 Dial Tone Delay

15.2.5.5.4 Dial Tone Removal

15.2.5.5.5 Post Dial Delay

15.2.5.5.5.2.1 PDD 1 - A - Intra LSO

15.2.5.5.5.2.2 PDD 1 - B - LSO to Another Local LSO

15.2.5.5.5.2.3 PDD 1 - C - MCI LSO to Other LSO

15.2.5.5.5.2.4 Impact of Number Portability (NP)

If a call forwarding option is used as an interim solution for Number Portability, the delay due to additional switching in the local access shall not be different from that experienced by any LEC served by NYNEX in a similar manner.

15.2.5.5.5.2.6 Partial Dial Timing

15.2.5.5.5.2.6.1 The interval between each information digit from a subscriber's line, until the LSO

or switching system has determined that the digit string is incomplete.

15.2.5.6 Unbundled local switching post dial delay

15.2.5.7 [INTENTIONALLY LEFT BLANK]

15.2.5.8 Unbundled common transport

Specific requirements for unbundled common transport or ancillary function are set forth in the common transport section.

15.2.5.9 Unbundled Dedicated Transport

Specific requirements for unbundled dedicated transport are set forth in the dedicated transport section.

15.2.5.10 Unbundled STPs

Specific requirements for Unbundled Signaling Transport Points are set forth in the Signaling Transfer Points section.

15.2.5.11 Unbundled signaling link transport

Specific requirements for Unbundled signaling link transport are set forth in the Signaling Link Transport section.

15.2.5.12 Unbundled SCPs/Databases

The performance requirements for databases (Number Portability, LIDB, E911, etc.) vary depending on the database and the applications it supports. Database-specific performance requirements are included in the sections addressing individual Network Elements and in applicable Bellcore documents.

15.2.5.13 Unbundled tandem switching

Specific requirements for unbundled tandem switching are set forth in the tandem switching section.

15.2.6 Test and Verification

15.2.6.1 NYNEX shall permit MCI to confirm the reported performance of any unbundled Network Element.

15.2.6.1.1 At MCIm's request, NYNEX will provide access to the unbundled Network Element sufficient for MCIm to test the performance of that unbundled Network Element to MCIm's satisfaction.

15.2.6.1.2 At MCIm's request, NYNEX will perform tests to confirm acceptable performance and provide MCIm with documentation of test and results.

15.3 Protection, Restoration, and Disaster Recovery

15.3.1 Scope

This Section 15.3 refers specifically to requirements on the use of redundant network equipment and facilities for protection, restoration, and disaster recovery as they apply to unbundled Network Elements provided by NYNEX.

15.3.2 Requirements

15.3.2.1 NYNEX shall provide protection, restoration, and disaster recovery capabilities at parity with those capabilities provided for its own facilities and equipment (e.g., equivalent circuit pack protection ratios, facility protection ratios).

15.3.2.2 NYNEX shall provide unbundled Network Elements and protection, restoration, and disaster recovery at parity with its own facilities and equipment.

15.3.2.3 In connection with the provision of unbundled Network Elements, NYNEX shall provide the use of spare equipment and facilities at parity with its own facilities and equipment.

15.3.2.4 NYNEX shall restore unbundled Network Elements which are specific to MCIm end user subscribers on a priority basis as MCIm may designate.

15.4 Synchronization

15.4.1 Definition:

Synchronization is the function which keeps all digital equipment in a communications network operating at the same average frequency. With respect to digital transmission, information is coded into discrete pulses. When these pulses are transmitted through a digital communications network, all synchronous Network Elements are traceable to a stable and accurate timing

source. Network synchronization is accomplished by timing all synchronous Network Elements in the network to a stratum 1 source so that transmission from these network points have the same average line rate.

15.4.2 Technical Requirements

The following requirements shall apply when NYNEX provides synchronization to equipment that MCI owns and operates within a NYNEX location. In addition, these requirements apply to synchronous equipment that is owned by NYNEX and is used to provide an unbundled Network Element to MCI.

15.4.3 Synchronization – Distribution Requirements

15.4.3.1 To the extent that NYNEX has deployed such equipment for its own network the timing provided by the Central office BITS shall conform to the relevant and applicable standards as specified in ANSI T1.101-1994 and Bellcore TR-NWT-001244 Clocks for the Synchronized Network: Common Genetic Criteria.

15.4.3.2 To the extent that NYNEX has deployed such equipment for its own network the timing provided by the Central office BITS shall be powered by primary and backup power sources.

15.4.3.3 [INTENTIONALLY LEFT BLANK]

15.4.3.4 [INTENTIONALLY LEFT BLANK]

15.4.3.5 [INTENTIONALLY LEFT BLANK]

15.4.3.6 [INTENTIONALLY LEFT BLANK]

15.4.3.7 [INTENTIONALLY LEFT BLANK]

15.4.3.8 [INTENTIONALLY LEFT BLANK]

15.4.3.9 [INTENTIONALLY LEFT BLANK]

15.4.3.10 [INTENTIONALLY LEFT BLANK]

15.4.3.11 [INTENTIONALLY LEFT BLANK]

15.4.3.12 For non-SONET equipment, NYNEX, where it provides such equipment for itself in its network, shall provide synchronization facilities

which, at a minimum, comply with the standards set forth in ANSI T1.101-1994.

15.5 SS7 Network Interconnection

15.5.1.1 Definition:

Figure 8 depicts SS7 Network Interconnection. SS7 Network Interconnection is the interconnection of MCI local STPs with NYNEX STPs. This interconnection enables the exchange of SS7 messages among NYNEX switching systems and databases, MCI local or tandem switching systems, and other third-party switching systems directly connected to the NYNEX SS7 network.

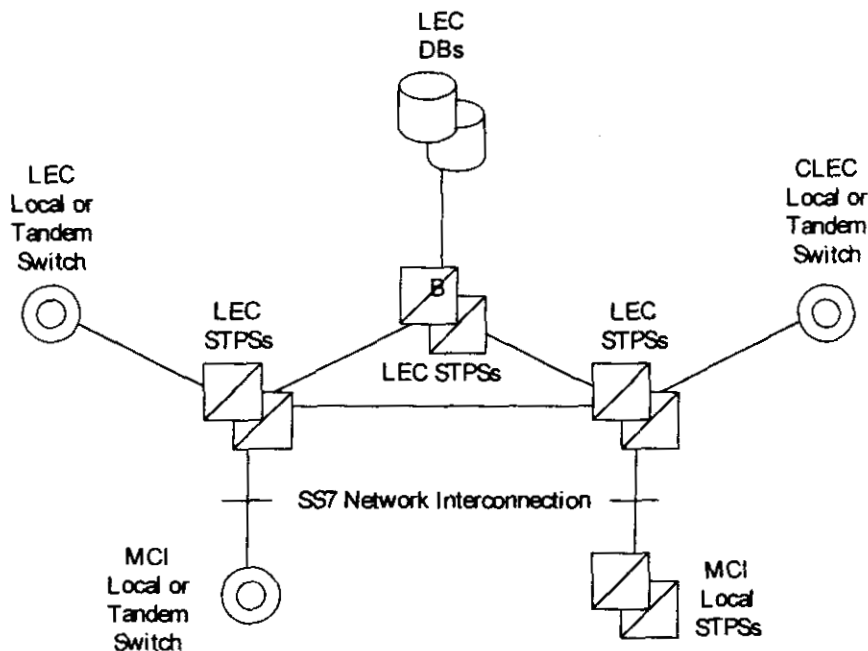


Figure 8. SS7 Network Interconnection

15.5.2 Technical Requirements

15.5.2.1 SS7 Network Interconnection shall provide connectivity to all components of the NYNEX SS7 network, including:

15.5.2.1.1 NYNEX local or tandem switching systems to which MCIIm has trunks or sends TCAP messages as noted in this document;

15.5.2.1.2 NYNEX databases and subsystems as agreed to in this document; and

15.5.2.1.3 Other third-party local or tandem switching systems provided that valid agreements for such interconnection are in effect among all parties concerned.

15.5.2.2 The connectivity provided by SS7 Network Interconnection shall fully support the agreed functions of NYNEX switching systems and databases and MCIIm or other third-party switching systems with A-link access to the NYNEX SS7 network.

15.5.2.3 In particular, Figure 9 depicts a circumstance where SS7 Network Interconnection shall provide transport for certain types of TCAP messages. If traffic is routed based on dialed or translated digits between an MCIIm local switching system and a NYNEX or other third-party local switching system, either directly or via a NYNEX tandem switching system, then the NYNEX SS7 network shall convey via SS7 Network Interconnection the TCAP messages that are necessary to provide Call MCIIm local STPs and the NYNEX or other third-party local switch.

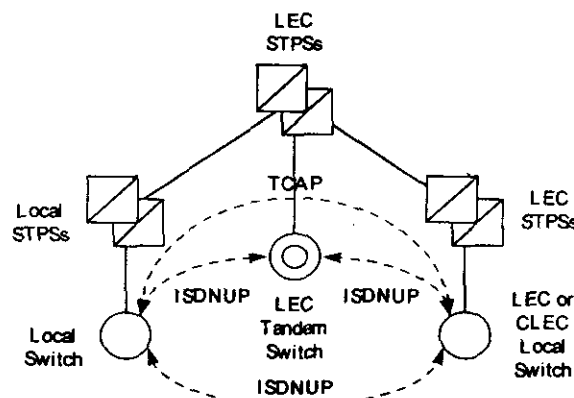


Figure 9. Interswitch TCAP Signaling for SS7 Network Interconnection

15.5.2.4 When the capability to route messages based on ISNI is generally available on NYNEX STPs, the NYNEX SS7 Network shall also convey TCAP messages using SS7 Network Interconnection in similar circumstances where the NYNEX switch routes traffic based on a CIC.

15.5.2.5 If and when available, and NYNEX deploys such capability in its own network, the SS7 Network Interconnection shall provide all the mutually agreed functions of the SCCP necessary for Class 0 (basic connectionless) service (Reference Section 18.11). In particular, this includes GTT and SCCP Management procedures as necessary.

15.5.2.6 Where the destination signaling point is a NYNEX switching system or DB, or is another third-party local or tandem switching system directly connected to the NYNEX SS7 network, SS7 Network Interconnection shall include final GTT of messages to the destination and SCCP Subsystem Management of the destination.

15.5.2.7 To the extent necessary, SS7 Network Interconnection shall include intermediate GTT of messages to a gateway pair of MCIm local STPs, and shall not include SCCP Subsystem Management of the destination.

15.5.2.8 If and when Internetwork MRVT and SRVT become available capabilities of NYNEX STPs, NYNEX and MCIm shall discuss provisioning these functions of the OMA&P.

15.5.3 Interface Requirements

15.5.3.1 NYNEX shall offer the following SS7 Network Interconnection options to connect MCIm or MCIm-designated STPs to the NYNEX SS7 network:

15.5.3.1.1 D-link interface from MCIm STPs.

15.5.3.2 Each interface shall be provided by one or more sets (layers) of signaling links, as follows:

15.5.3.2.1 A D-link layer shall consist of four links, as depicted in Figure 10.

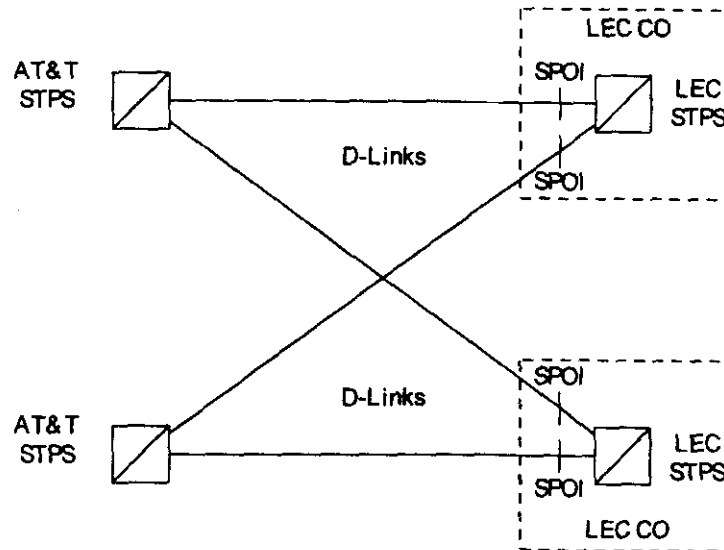


Figure 10. D-LINK Interface

15.5.3.3 The SPOI for each link shall be located at a cross-connect element, including but not limited to a DSX-1, in the CO where the NYNEX STPs is located. There shall be a DS1 or higher rate transport interface at each of the SPOIs. Each signaling link shall appear as a DS0 channel within the DS1 or higher rate interface. NYNEX shall offer higher rate DS1 signaling links for interconnecting MCIm local switching systems or STPs with NYNEX STPs as soon as such higher rate DS1 signaling links become approved ANSI standards and deployed capabilities of NYNEX STPs.

15.5.3.3.1 In each LATA, there will be at least two signaling points of interconnection SPOIs.

15.5.3.3.2 SPOI locations will be negotiated by both parties and shall be mutually acceptable. A SPOI can be any existing cross connect point in the LATA. Each Party agrees to select reasonable and efficient SPOI locations.

15.5.3.3.3 Each signaling link requires a port on each Party's STP.

15.5.3.4 Both Parties shall provide intraoffice diversity on those facilities they own between the SPOIs and the STPs, so that no single failure of intraoffice facilities or equipment shall cause the failure of both D-links connecting to a NYNEX STP.

15.5.3.5 The protocol interface requirements for SS7 Network Interconnection include the MTP, ISDNUP, SCCP and TCAP. As applicable, these protocol interfaces shall conform to the following specifications:

15.5.3.5.1 Bellcore GR-905-CORE, (CCSNIS) Supporting Network Interconnection, MTP, and ISDNUP;

15.5.3.5.2 Bellcore GR-1428-CORE, (CCSNIS) Supporting Toll Free Service; and

15.5.3.5.3 Bellcore GR-1432-CORE, CCSNIS SCCP and TCAP.

15.5.3.6 NYNEX shall exchange appropriate messages with MCI local or tandem switching systems for those services to which both Parties have agreed.

15.5.4 SS7 Network Interconnection shall conform as necessary to the requirements for SS7 Network Interconnection set forth in the technical references set forth in Section 18.15.

15.6 Network Interconnection

15.6.1 Technical Requirements

15.6.1.1 When requested by MCI, NYNEX shall provide interconnections between the NYNEX Network Elements provided to MCI and MCI's network at transmission rates designated by MCI and as available from NYNEX.

15.6.1.2 Traffic shall be combined and routed as follows:

15.6.1.2.1 NYNEX shall provide direct trunks for intraLATA traffic (except 911, directory assistance, operator services, IMAS, and other services that may require special routing) and, subject to mutual agreement, NYNEX shall allow MCI to route such traffic either directly to the NYNEX specified terminating sector NYNEX tandem or directly to a NYNEX end-office. At MCI's option, intraLATA toll and local traffic shall be combined onto one trunk group.

15.6.1.2.2 At MCI's request, NYNEX shall accept MCI traffic destined to the NYNEX Operator Systems switches, on trunks from an MCI end-office or an MCI tandem. MCI will be responsible

for ensuring that all protocols required to process such traffic are fully supported by its switches for this purpose.

15.6.1.2.3 If and as necessary to provide E911/911 service, NYNEX shall receive MCIm CAMA-ANI traffic destined to the NYNEX 911 PSAPs, or E911 tandems, on trunks from an MCIm end-office.

15.6.1.3 When requested by MCIm and a third party carrier, NYNEX shall provide interconnections between MCIm's network, and the other carrier's network through the NYNEX network at transmission rates mutually agreed to by all parties, including, but not limited to DS1, DS3, and SONET bit rates. NYNEX shall transport traffic to and from other local carriers and interLATA carriers through the NYNEX network, and at MCIm's request, NYNEX shall record and keep records of such traffic for MCIm billing purposes subject to charges for such services.

15.6.1.4 NYNEX shall provide two-way trunk groups for interconnections. At either Party's request, traffic shall be unidirectional on such trunks, in either direction, operating them as if they were one-way trunk groups.

15.6.1.5 Trunks shall be provisioned by mutual agreement in order to ensure the most reliable and efficient interchange of traffic.

15.6.1.6 NYNEX shall engineer its network to a B.01 high day network busy hour blocking standard. NYNEX shall ensure that parity with this standard is maintained for all interconnecting parties for those trunk routes for which NYNEX has engineering responsibility. For jointly engineered trunk routes, NYNEX will maintain this standard with the cooperation of the interconnecting party.

15.6.1.7 NYNEX shall provide for overflow routing from a given end office trunk group or groups onto the appropriate sector tandem trunk group in accordance with NYNEX's network sectorization plan and as mutually agreed by both Parties through the joint engineering process.

15.6.1.8 NYNEX and MCIm shall mutually agree on the establishment of two-way trunk groups for the exchange of traffic for other IXCs. These trunk groups can be provided in a "meet point" arrangement.

15.6.1.9 Interconnection shall be made available at mutually agreed upon points of interconnection. Any necessary and agreed upon trunk interconnection shall be provided, including, SS7, MF, DTMF, DialPulse, PRI-ISDN (where available), DID, CAMA-ANI, and necessary trunking to provide interim Number Portability.

15.6.1.10 Trunk Interface Requirements**15.6.1.10.1 911/E911 Trunks**

15.6.1.10.1.1 NYNEX shall allow MCIIm to provide direct trunking to each NYNEX 911 switch, or NYNEX E911 tandem, as is appropriate for the applicable serving area. These trunks are to be provided as one-way trunks from a given MCIIm end office to the NYNEX 911 switch or tandem.

15.6.1.10.1.2 NYNEX shall provide for overflow 911 traffic to be sent to the NYNEX operator services platform or, at MCIIm's request routed directly to MCIIm's operator services platform.

15.6.1.10.2 [INTENTIONALLY LEFT BLANK]**15.6.1.10.3 Local Switch and Access Tandem Trunks**

15.6.1.10.3.1 NYNEX shall provide trunk groups provisioned exclusively to carry intraLATA traffic upon request by MCIIm for such interconnection to its network from unbundled switching elements.

15.6.1.10.3.2 NYNEX shall provide trunk groups provisioned exclusively to carry interLATA traffic upon request by MCIIm for such interconnection to its network from unbundled switching elements.

15.6.1.10.3.3 NYNEX shall provide SS7 trunks which provide SS7 interconnection. At MCIIm's request, MF trunks may be substituted for SS7 trunks where applicable.

15.6.1.10.3.4 NYNEX shall comply with normal industry standard routing parameters for traffic to both local and interexchange carriers.

15.6.1.10.4 NYNEX Operator Services Trunks

15.6.1.10.4.1 For traffic from the NYNEX network to MCIIm for Operator Services, NYNEX shall jointly engineer an efficient interconnection with MCIIm to ensure that all offered traffic can terminate to the proper Operator Services switch.

15.6.1.10.4.2 NYNEX shall provide such operator service trunks as one-way trunks from the NYNEX network to the MCI network if so requested by MCI for termination to its operator services provider.

Section 16 Basic 911 and E911

The requirements for basic 911 and E911 are set forth in Attachment VIII, Section 7.1.1, "General Requirements" and Section 7.2.1 "Basic 911 and E911 Information Exchanges and Interfaces."

Section 17 Directory Assistance Data

The requirements for Directory Assistance data are set forth in Attachment VIII, Section 7.1.6.

Section 18 Technical & Performance Specifications For Unbundled Elements

The NYNEX telecommunications network is composed of facilities, functions and equipment of various vintages. The standards listed below may or may not have existed at the time that any particular facility, function or equipment was installed. For the purposes of applying the standards listed below, it shall be assumed that only those standards in effect at the time of the purchase and installation of a facility, function or item of equipment shall apply to said facility, function or equipment; except that to the extent a facility, function or item of equipment has been modified or enhanced, the standards to which the modification or enhancement was engineered shall apply.

18.1 General

- a) ANSI-OAM&P (T1.115) -- SS7 Monitoring and Measurements.
- b) Bellcore SR-TSV-002275 BOC Notes on the LEC Networks.
- c) Committee T1 (ANSI) Standards:

- T1.101 Digital Network Synchronization
- T1.102 Digital Hierarchy - Electrical Interface
- T1.105 SONET Interface Standard
- T1.107 Digital Hierarchy Formats Specification
- T1.110 SS7, General Information
- T1.111 SS7, Message Transfer Part
- T1.112 SS7, Signaling Connection Control Part
- T1.113 SS7, ISDN User Part
- T1.114 SS7, Transaction Capabilities Application Part
- T1.115 SS7, Monitoring & Measurements

T1.116 SS7, Operations, Maintenance & Administration Part.

- d) FR64 / TR374 --"Local Switching System Generic Requirements".
- e) GR929 --"Reliability & Quality Measurements for Telecommunications Systems".
- f) Network Operations Forum (NOF) -- Issue 229 "OAM&P Issues For Interconnected LEC Networks.
- g) TR905 Bellcore Common Channel Signaling (CCS) Network Interface Specification -- Interconnection.
- h) TR1149 -- Operational Support System Generic Requirements, Section 10 covering TCAP.
- i) NOF Reference Document.

18.2 LOOPS**18.2.1 Loop Concentrator / Multiplexor**

- a) ANSI T1.106-1988, - Digital Hierarchy - Optical Interface Specifications (Single Mode).
- b) ANSI T1.105-1995, - Synchronous Optical Network (SONET) - Basic Description, Including Multiplex Structure, Rates & Formats.
- c) ANSI T1.102-1993, - Digital Hierarchy - Electrical Interfaces.
- d) ANSI T1.403-1989, - Carrier to Subscriber Installation, DS1 Metallic Interface Specification.
- e) Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET), Common Generic Criteria.
- f) Bellcore GR-303-CORE, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface.
- g) Bellcore TR-NWT-000057, Functional Criteria for Digital Loop Carrier Systems.
- h) Bellcore TR-NWT-000303, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface (including Supplement 1).

- i) Bellcore TR-NWT-000393, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.
- j) Bellcore TR-TSY-000673, Operations Systems Interface for an IDLC System.
- k) Bellcore TR-TSY-000008, Digital Interface Between the SLC 96 Digital Loop Carrier System and a Local Digital Switch.
- l) Bellcore SR-3147, ISDN Basic Loop Qualification Guidelines.

18.3 Loop Feeder

- a) ANSI T1.106-1988, - Digital Hierarchy - Optical Interface Specifications (Single Mode).
- b) ANSI T1.105-1995, - Synchronous Optical Network (SONET) - Basic Description, Including Multiplex Structure, Rates & Formats.
- c) ANSI T1.102-1993, - Digital Hierarchy - Electrical Interfaces.
- d) ANSI T1.403-1989, - Carrier to Subscriber Installation, DS1 Metallic Interface Specification.
- e) Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET), Common Generic Criteria.
- f) Bellcore GR-303-CORE, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface.
- g) Bellcore TR-NWT-000057, Functional Criteria for Digital Loop Carrier Systems.
- h) Bellcore TR-NWT-000303, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface (including Supplement 1).
- i) Bellcore TR-NWT-000393, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.
- j) Bellcore TR-NWT-000499, section 7 for DS1 interfaces.
- k) Bellcore TR-TSY-000673, Operations Systems Interface for an IDLC System.
- l) Bellcore TR-TSY-000008, Digital Interface Between the SLC 96 Digital Loop Carrier System and a Local Digital Switch.

m) Bellcore SR-3147, ISDN Basic Loop Qualification Guidelines.

18.4 NIDs

a) Bellcore Generic Requirement GR-49 CORE, "Generic Requirements for Outdoor Telephone Network Interface Devices."

b) Bellcore TR-NWT-00239 "Indoor Telephone Network Interfaces."

c) Bellcore TR-NWT-0000937 "Generic Requirements for Outdoor & Indoor Building Entrance."

d) Bellcore TR-NWT-000133 "Generic Requirements for Network Inside Wiring."

e) Bellcore TR-NWT-000049 "Generic Requirements for Outdoor Telephone Network Interface Devices."

f) Bellcore Technical Advisory TA-TSY-000120 "Subscriber Premises or Network Ground Wire."

18.5 All Loop Distribution

a) Bellcore TR-TSY-000057 "Functional Criteria for Digital Loop Carrier Systems."

b) Bellcore TR-NWT-000393, "Generic Requirements for ISDN Basic Access Digital Subscriber Lines."

18.6 Fiber Distribution

a) Bellcore TR-NWT-000253, SONET Transport Systems: Common Criteria (A module of TSGR, FR-NWT-000440).

18.7 Local Switching

a) Bellcore's Local/LATA Switching Systems General Requirements (FR-NWT-000064).

b) Bellcore's standards for: TCAP (GR-1432-CORE), ISUP (GR-905-CORE), Call Management (GR-1429-CORE), Switched Fractional DS1 (GR-1357-CORE), Toll Free Service (GR-1428-CORE), Calling Name (GR-1597-CORE), Line Information Database (GR-954-CORE), and Advanced Intelligent Network (GR-2863-CORE).

c) Bellcore GR-1298-CORE, AIN Switching System Generic Requirements.

- d) Bellcore GR-1299-CORE, AIN Switch-Service Control Point (SCP)/Adjunct Interface Generic Requirements.
- e) Bellcore TR-NWT-001284, AIN 0.1 Switching System Generic Requirements.
- f) SR-NWT-002247, AIN Release 1 Update.

18.8 Common Transport

- a) ANSI T1.101-1994, Synchronization Interface Standard Performance and Availability.
- b) ANSI T1.102-1993, Digital Hierarchy - Electrical Interfaces.
- c) ANSI T1.102.01-199x, Digital Hierarchy - VT1.5.
- d) ANSI T1.105-1995, Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats.
- e) ANSI T1.105.01-1995, Synchronous Optical Network (SONET) Automatic Protection Switching.
- f) ANSI T1.105.02-1995, Synchronous Optical Network (SONET) - Payload Mappings.
- g) ANSI T1.105.03-1994, Synchronous Optical Network (SONET) - Jitter at Network Interfaces.
- h) ANSI T1.105.03a-1995, SONET-Jitter at Network Interfaces - DS1 Supplement.
- i) ANSI T1.105.05-1994, SONET - Tandem Connection.
- j) ANSI T1.105.06-199x, SONET Physical Layer Specifications.
- k) ANSI T1.105.07-199x, SONET - Sub STS-1 Interface Rates and Formats.
- l) ANSI T1.105.09-199x, SONET - Network Element Timing and Synchronization.
- m) ANSI T1.106-1988, - Digital Hierarchy - Optical Interface Specifications (Single Mode).
- n) ANSI T1.107-1988, - Digital Hierarchy - Formats Specifications.

- o) ANSI T1.107a-1990 - Digital Hierarchy - Supplement to Formats Specifications (DS3 Format Applications).
- p) ANSI T1.107b-1991 - Supplement to Formats Specifications.
- q) ANSI T1.117-1991, Digital Hierarchy - Optical Interface. Specifications (SONET) (Single Mode - Short Reach).
- r) ANSI T1.403-1989, Carrier to Subscriber Installation, DS1 Metallic Interface Specification.
- s) ANSI T1.404-1994, Network-to-Subscriber Installation - DS3 Metallic Interface Specification.
- t) ITU Recommendation G.707, Network node interface for the synchronous digital hierarchy (SDH).
- u) ITU Recommendation G.704, Synchronous frame structures used at 1544, 6312, 2048, 8488 and 44736 kbit/s hierarchical levels.
- v) Bellcore FR-440 and TR-NWT-000499, Transport Systems Generic Requirements (TSGR): Common Requirements.
- w) Bellcore GR-820-CORE, Generic Transmission Surveillance: DS1 & DS3 Performance.
- x) Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET); Common Generic Criteria.
- y) Bellcore TR-NWT 000507, Transmission, Section 7, Issue 5 (Bellcore, December 1993). (A module of LSSGR, FR-NWT-000064.)
- z) Bellcore TR-NWT-000776, Network Interface Description for ISDN Subscriber Access.
- aa) Bellcore TR-INS-000342, High-Capacity Digital Special Access Service-Transmission Parameter Limits and Interface Combinations.
- bb) Bellcore ST-TEC-000052, Telecommunications Transmission Engineering Textbook, Volume 2: Facilities.
- cc) Bellcore ST-TEC-000051, Telecommunications Transmission Engineering Textbook Volume 1: Principles.

18.9 SONET Systems – Unbundled Dedicated Transport

- a) ANSI T1.105.04-1995 Synchronous Optical Network (SONET) - Data Communication Channel Protocols and Architectures.
- b) ANSI T1.119-1994, SONET - Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications.
- c) ANSI T1.119.01-1995, SONET Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Protection Switching Fragment.
- d) ANSI T1.119.02-199x, SONET Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Performance Monitoring Fragment.
- e) ANSI T1.231-1993, Digital Hierarchy - Layer 1 In-Service Digital Transmission Performance Monitoring.

18.10 Unbundled DCS

- a) ANSI T1.102-1993, Digital Hierarchy - Electrical Interfaces.
- b) ANSI T1.102.01-199x, Digital Hierarchy - VT1.5.
- c) ANSI T1.105-1995, SONET - Basic Description including Multiplex Structure, Rates and Formats.
- d) ANSI T1.105.03-1994, SONET - Jitter at Network Interfaces.
- e) ANSI T1.105.03a-1995, SONET: Jitter at Network Interfaces - DS1 Supplement.
- f) ANSI T1.105.06-199x, SONET - Physical Layer Specifications.
- g) ANSI T1.106-1988, - Optical Interface Specifications (Single Mode).
- h) ANSI T1.107-1988, Digital Hierarchy - Formats Specifications.
- i) ANSI T1.107a-1990, - Digital Hierarchy - Supplement to Formats Specifications (DS3 Format Applications).
- j) ANSI T1.107b-1991, - Digital Hierarchy - Supplement to Formats Specifications.
- k) ANSI T1.117-1991, - Digital Hierarchy - Optical Interface Specifications (SONET) (Single Mode - Short Reach).